## ABSTRACT OF THE DISCLOSURE

Provided are a composition for forming film which can form porous film excelling in dielectric constant, adhesiveness, uniformity of the film, mechanical strength and having low hygroscopicity; porous film and a method for forming the film; and a high-performing and highly reliable semiconductor device comprising the porous film inside. More specifically, provided is a composition for forming porous film, the composition comprising siloxane polymer and one or more quaternary ammonium salts represented by following formula (1) or (2):

$$[(R^1)_4N]^+[R^2X]^-$$
 (1)

$$H_k[(R^1)_4N]_m^+ Y^{n-}$$
 (2)

wherein X represents  $CO_2$ ,  $OSO_3$  or  $SO_3$ ; Y represents  $SO_4$ ,  $SO_3$ ,  $CO_3$ ,  $O_2C-CO_2$ ,  $NO_3$  or  $NO_2$ ; and k is 0 or 1, m is 1 or 2 and n is 1 or 2 in proviso that n=1 requires k=0 and m=1, and n=2 requires k=0 and m=2, or k=1 and m=1.